



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,285	08/21/2003	Brett J. Williams	100205006-1	9347
22879 7590 06/22/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER SINGH, SATWANT K	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 06/22/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/646,285		WILLAMS ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Satwant K. Singh		2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 5 recites the limitation "if the packet is an allowed packet" in claim 1.

There is insufficient antecedent basis for this limitation in the claim. It appears to the examiner the claim 5 is dependent on claim 2. Appropriate correction is required.

3. Claim 19 recites the limitation "if the packet is an allowed packet" in claim

15. There is insufficient antecedent basis for this limitation in the claim. It appears to the examiner the claim 19 is dependent on claim 16. Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 31 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 13 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. Claim 13, while defining a machine-readable medium does not clearly define a "computer-readable medium" and is thus non-statutory for that reason. The

Art Unit: 2625

examiner suggests amending the claim to embody the instructions on a "computer-readable medium" in order to make the claim statutory.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Lamming et al. (US 6,922,725).

5. Regarding Claim 14, Lamming et al disclose an apparatus for providing a visitor safe wireless printer access point, the apparatus comprising: means connecting a wireless computing device to a wireless network (mobile computing device communicates using an LCC transceiver) (col. 7, lines 54-67); means for transmitting the packet to a spooling device (parameters of the document service request are packaged and transmitted to the document server) (col. 10, lines 33-44), if the packet is an allowed packet (document service requests are authenticated) (col. 17, lines 38-48); means for downloading a printer driver and a printer driver information to the wireless computing device, and initializing the printer driver (driver is loaded if necessary for the specified output device that adapted to process the format in which the retrieved document exists) (col. 10,

Art Unit: 2625

lines 55-65); and means for using the wireless computing device to print via the available printer in the secure wired network (output device outputs the rendered document) (col. 12, lines 51-61).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6-13, 15, 20-26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamming et al. (US 6,922,725) in view of Ferlitsch et al. (US 2004/0190042).

3. Regarding Claim 1, Lamming et al teach a method for providing a visitor safe wireless printer access point, the method comprising: connecting a wireless computing device to a wireless network, where the wireless network provides a public access point to a print spooling device (Fig. 3, S306) (computing device transmits a service discovery request over the first wireless communications channel) (col. 8, lines 44-59); determining all available printers in a secure wired network (multiple output devices may respond to the service discovery request) (col. 60-67); selecting one of available printers for printing (identify at least one output device) (col. 9, lines 1-12).

Lamming et al fail to teach a method for providing a visitor safe wireless printer access point, the method comprising: establishing a print path through the

Art Unit: 2625

spooling device to the selected printer; sending a print job via the wireless network to the spooling device; spooling the print job on the spooling device; and sending the print job via the secure wired network to the selected printer.

Ferlitsch et al teach a method for providing a visitor safe wireless printer access point, the method comprising: establishing a print path through the spooling device to the selected printer (Fig. 3, S70-S74) (user selects a command or sequence of commands and/or stimulus to the computing device, which indicates the user's intention to spool a print job) (page 6, paragraph [0059]); sending a print job via the wireless network to the spooling device (Fig. 3, S74-78) (printer device is selected) (page 6, paragraph [0060]); spooling the print job on the spooling device (Fig. 3, S82) (computing device initiates the spooling of the print job) (page 6, paragraph [0062]); and sending the print job via the secure wired network to the selected printer (Fig. 3, S84) (spooler despools the spool file to the associated print processor the selected printing device(s)) (page 6, paragraph [0064]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming with the teaching of Ferlitsch to allow a user to wirelessly spool/despool a print job.

4. Regarding Claim 6, Lamming et al tech a method, wherein the action of determining all available printers in a secure wired network comprises: starting a utility application in the wireless device (begin a service request), where the utility application comprises a browser that is directed to the spooling device (user of the mobile computing device navigates the web browser to a web page that

Art Unit: 2625

provides a list of directory services for a selected document) (col. 18, lines 54-67, col. 18, lines 1-4).

5. Regarding Claim 7, Lamming et al teach a method, wherein the action of determining all available printers in a secure wired network comprises: starting a utility application in the wireless device (begin a service request), where the utility application comprises a network printer application that is configured to discover the available printers through the spooling device (web browser communicates with a web server operating on the document server) (col. 18, lines 54-67, col. 18, lines 1-4).

6. Regarding Claim 8, Lamming et al teach a method, further comprising: downloading a printer driver from the spooling device to the wireless device; and initiating the printer driver in the wireless device (driver is loaded if necessary) (col. 10, lines 56-65).

7. Regarding Claim 9, Lamming et al teach a method, further comprising: relaying a print job status from the printer, via the secure wired network, to the spooling device; and relaying the print job status from the spooling device, via the wireless network, to the wireless device (device status) (col. 9, lines 43-49).

8. Regarding Claim 10, Lamming et al teach a method, wherein the wireless network is a wireless PRINT network (forming the first network is an output device) (col. 6, lines 50-55).

9. Regarding Claim 11, Lamming et al teach a method, wherein the wireless PRINT network is a public access point to at least one print spooling device (Fig. 3, document server 108).



Art Unit: 2625

10. Regarding Claim 12, Lamming et al teach a method, wherein the spooling device is configured to act as a bridge to send print jobs from the wireless device to the selected printer (an application program executes at or under the direction of the document server to render the document located at 320) (col. 10, lines 66-67, col. 11, lines 1-5).

11. Regarding Claim 13, Lamming et al teach a method, wherein the spooling device is configured to act as a firewall to prevent access to a secure device in the secured wired network (document services request are authenticated at firewall 1224) (col. 17, lines 38-48).

12. Regarding Claim 15, Lamming et al teach an apparatus for permitting print operations from a network printer in a secure wired network, the apparatus comprising: a wireless computing device configured to connect to a wireless network, the wireless network including a public access point (Fig. 3, S306) (computing device transmits a service discovery request over the first wireless communications channel) (col. 8, lines 44-59).

Lamming et al fail to teach an apparatus for permitting print operations from a network printer in a secure wired network, the apparatus comprising: a print spooling device that is accessed from the public access point; wherein a print job is sent from the wireless computing device via the wireless network to the spooling device; and wherein the print job is spooled on the spooling device and the print job is sent via a secure wired network to a selected printer.

Ferlitsch et al teach an apparatus for permitting print operations from a network printer in a secure wired network, the apparatus comprising: a print



Art Unit: 2625

spooling device that is accessed from the public access point (Fig. 3, S70-S74) (user selects a command or sequence of commands and/or stimulus to the computing device, which indicates the user's intention to spool a print job) (page 6, paragraph [0059]); wherein a print job is sent from the wireless computing device via the wireless network to the spooling device (Fig. 3, S74-78) (printer device is selected) (page 6, paragraph [0060]); and wherein the print job is spooled on the spooling device Fig. 3, S82) (computing device initiates the spooling of the print job) (page 6, paragraph [0062) and the print job is sent via a secure wired network to a selected printer (Fig. 3, S84) (spooler despools the spool file to the associated print processor the selected printing device(s)) (page 6, paragraph [0064]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming with the teaching of Ferlitsch to allow a user to wirelessly spool/despool a print job.

13. Regarding Claim 20, Lamming et al teach an apparatus, wherein the mobile wireless device is configured to start a utility application (begin a service request), where the utility application comprises a browser that is directed to the spooling device (user of the mobile computing device navigates the web browser to a web page that provides a list of directory services for a selected document) (col. 18, lines 54-67, col. 18, lines 1-4).

14. Regarding Claim 21, Lamming et al teach an apparatus, wherein the mobile wireless device is configured to start a utility application (begin a service request), where the utility application comprises a network printer application that

Art Unit: 2625

is configured to discover the available printers through the spooling device (web browser communicates with a web server operating on the document server) (col. 18, lines 54-67, col. 18, lines 1-4).

15. Regarding Claim 22, Lamming et al teach an apparatus, wherein the spooling device is configured to download a printer driver to the wireless device, and wherein the printer driver is initiated in the wireless device (driver is loaded if necessary) (col. 10, lines 56-65).

16. Regarding Claim 23, Lamming et al teach an apparatus, wherein a status of the print job is relayed from the printer, via the secure wired network, to the spooling device; and wherein the status of the print job is also relayed from the spooling device, via the wireless network, to the wireless device (device status) (col. 9, lines 43-49).

17. Regarding 24, Lamming et al teach an apparatus, wherein the wireless network is a wireless PRINT network (forming the first network is an output device) (col. 6, lines 50-55).

18. Regarding 25, Lamming et al teach an apparatus, wherein the spooling device is configured to act as a bridge to send print jobs from the wireless device to the selected printer (an application program executes at or under the direction of the document server to render the document located at 320) (col. 10, lines 66-67, col. 11, lines 1-5).

19. Regarding 26, Lamming et al teach an apparatus, wherein the spooling device is configured to act as a firewall to prevent access to a secure device in

Art Unit: 2625

the secured wired network (document services request are authenticated at firewall 1224) (col. 17, lines 38-48).

20. Regarding Claim 31, Lamming et al teach an article of manufacture, comprising: a machine-readable medium having stored thereon instructions to: connect a wireless computing device to a wireless network where the wireless network provides a public access point to a print spooling device (Fig. 3, S306) (computing device transmits a service discovery request over the first wireless communications channel) (col. 8, lines 44-59); determine all available printers in a secure wired network (multiple output devices may respond to the service discovery request) (col. 60-67); select one of available printers for printing (identify at least one output device) (col. 9, lines 1-12) .

Lamming et al fail to teach an article of manufacture, comprising: a machine-readable medium having stored thereon instructions to: establish a print path through the spooling device to the selected printer; send a print job via the wireless network to the spooling device, where the print job is spooled in a spooling device and sent via the secured wired network to the selected printer.

Ferlitsch et al teach an article of manufacture, comprising: a machine-readable medium having stored thereon instructions to: establish a print path through the spooling device to the selected printer (Fig. 3, S70-S74) (user selects a command or sequence of commands and/or stimulus to the computing device, which indicates the user's intention to spool a print job) (page 6, paragraph [0059]); send a print job via the wireless network to the spooling device (Fig. 3, S74-78) (printer device is selected) (page 6, paragraph [0060]), where the print

Art Unit: 2625

job is spooled in a spooling device (Fig. 3, S82) (computing device initiates the spooling of the print job) (page 6, paragraph [0062]) and sent via the secured wired network to the selected printer (Fig. 3, S84) (spooler despools the spool file to the associated print processor the selected printing device(s)) (page 6, paragraph [0064]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming with the teaching of Ferlitsch to allow a user to wirelessly spool/despool a print job.

21. Claim 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamming et al. (US 6,922,725) in view of Ferlitsch et al. (US 2004/0190042) and Fong (US 2005/0243777).

22. Regarding Claim 27, Lamming et al teach an apparatus for providing a visitor safe wireless printer access point, the apparatus comprising: a wireless computing device configured to connect to a wireless network with a printer access point device (Fig. 3, S306) (computing device transmits a service discovery request over the first wireless communications channel) (col. 8, lines 44-59).

Lamming et al fail to teach an apparatus for providing a visitor safe wireless printer access point, the apparatus comprising: a spooling device configured to download a printer driver and a printer driver information to the wireless computing device; and wherein the spooling device is configured to check a packet from the wireless computing device in order to determine if the wireless computing device is attempting to connect to an available printer in a

Art Unit: 2625

secure wired network, and to transmit the packet to the spooling device if the packet is an allowed packet, so that the wireless computing device can be used to print via the available printer in the secure wired network.

Ferlitsch et al teach an apparatus for providing a visitor safe wireless printer access point, the apparatus comprising: a spooling device configured to download a printer driver and a printer driver information to the wireless computing device (computing device initiates the spooling of the print jobs, which includes the printer driver constructing print job specific information) (page 6, paragraph [0062]).

Fong teaches an apparatus for providing a visitor safe wireless printer access point, the apparatus comprising: and wherein the spooling device is configured to check a packet from the wireless computing device in order to determine if the wireless computing device is attempting to connect to an available printer in a secure wired network, and to transmit the packet to the spooling device if the packet is an allowed packet, so that the wireless computing device can be used to print via the available printer in the secure wired network (main server permits access only to those terminals that are registered) (page 6, paragraphs [0066] and [0067]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming with the teachings of Ferlitsch and Fong to provide secure transmission of print jobs over a wireless network.

Art Unit: 2625

23. Regarding Claim 28, Lamming et al teach an apparatus, wherein the printer access point device is configured to check standard wireless security settings (request authenticated using the certificate server) (col. 17, lines 38-49).
24. Regarding Claim 29, Lamming et al teach an apparatus, wherein the spooler device is configured to launch a print web page that shows at least one available printer in the secure wired network, in response to receipt of an allowed packet (Fig. 17, S1702-1712).
25. Regarding Claim 30, Lamming et al teach an apparatus, wherein the printer access point device prevents the mobile wireless device from accessing a secured device in the secured wired network, if the wireless security settings are not correct (request authenticated using the certificate server) (col. 17, lines 38-49).
26. Claims 2-5, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamming et al and Ferlitsch et al as applied to claim 1 and 15 above, and further in view of Fong (US 2005/0243777).
27. Regarding Claim 2, Lamming et al and Ferlitsch et al fail to teach a method, wherein the print job is split into network packets and transmitted to the spooling device, if the packets are allowed packets.

Fong teaches a method, wherein the print job is split into network packets and transmitted to the spooling device (mobile terminal sends data packets to the main server), if the packets are allowed packets (main server permits access only to those terminal that are registered) (page 6, paragraphs [0066]).

Art Unit: 2625

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming and Fong to prevent unauthorized access to the printing network.

28. Regarding Claim 3, Lamming et al and Ferlitsch et al fail to teach a method, wherein the packets are checked by the public access point device.

Regarding Claim 3, Fong teaches a method, wherein the packets are checked by the public access point device (main server receives the identification data packets from the server) (page 6, paragraphs [0067]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming and Fong to prevent unauthorized access to the printing network.

29. Regarding Claim 4, Lamming et al teach a method, further comprising: in response to receipt of an allowed packet by the spooling device, launching a print web page that shows at least one available printer in the secure wired network (Fig. 17, S1712) (Fig. 17, S1704-1712) (col. 18, lines 53-67, col. 19, lines 1-4).

30. Regarding Claim 5, Lamming et al and Ferlitsch et al fail to teach a method, further comprising: if the packet is not an allowed packet, then preventing the mobile wireless device from accessing a secure device in the secured wired network.

Fong teaches a method, further comprising: if the packet is not an allowed packet, then preventing the mobile wireless device from accessing a secure device in the secured wired network (main server permits access only to those terminal that are registered) (page 6, paragraphs [0066]).



Art Unit: 2625

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming and Fong to prevent unauthorized access to the printing network.

31. Regarding Claim 16, Lamming et al and Ferlitsch et al fail to teach an apparatus, wherein the print job is split into network packets and transmitted to the spooling device, if the packets are allowed packets.

Fong teaches an apparatus, wherein the print job is split into network packets and transmitted to the spooling device (mobile terminal sends data packets to the main server), if the packets are allowed packets (main server permits access only to those terminal that are registered) (page 6, paragraphs [0066]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming and Fong to prevent unauthorized access to the printing network.

32. Regarding Claim 17, Lamming et al and Ferlitsch et al fail to teach an apparatus, wherein the packets are checked by the public access point device.

Regarding Claim 3, Fong teaches an apparatus, wherein the packets are checked by the public access point device (main server receives the identification data packets from the server) (page 6, paragraphs [0067]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming and Fong to prevent unauthorized access to the printing network.

Art Unit: 2625

33. Regarding Claim 18, Lamming et al teach an apparatus, wherein the spooling device is configured to launch a print web page that shows at least one available printer in the secure wired network, in response to receipt of an allowed packet by the spooling device (Fig. 17, S1704-1712) (col. 18, lines 53-67, col. 19, lines 1-4).

34. Regarding Claim 19, Lamming et al and Ferlitsch et al fail to teach an apparatus, wherein the mobile wireless device is prevented from accessing a secure device in the secured wired network, if the packet is not an allowed packet.

Fong teaches an apparatus, wherein the mobile wireless device is prevented from accessing a secure device in the secured wired network, if the packet is not an allowed packet network (main server permits access only to those terminal that are registered) (page 6, paragraphs [0066]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Lamming and Fong to prevent unauthorized access to the printing network.

### ***Conclusion***

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anderson et al. (US 7,124,367) discloses an adjustable user interface.

Liang et al (US 7,212,297) discloses a method and system for printing content from a computing device.

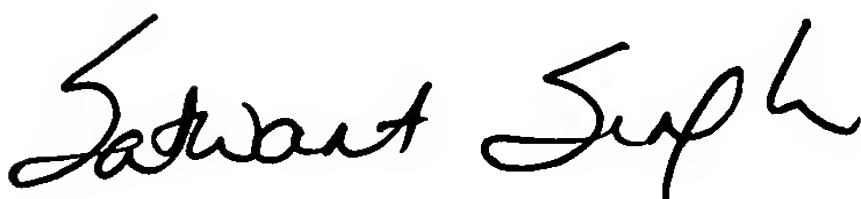
Art Unit: 2625

**Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (571) 272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



sks



KING Y. POON  
PRIMARY EXAMINER  
Satwant K. Singh  
Examiner  
Art Unit 2625